

## ABSTRACT

### Include Figure 2

Previously it has only been possible to allocate unique internet protocol (IP) addresses to nodes in open systems interconnection (OSI) communications networks such as those using integrated IS-IS, by manual configuration. This is time consuming and expensive because an operator must travel to the site of the node. By exploiting features of the OSI routing protocol the present invention enables IP addresses to be automatically allocated to the new network nodes. This is particularly advantageous for new intermediate systems such as optical multiplexers with integral routers. Once an IP address has been allocated, the node can be managed by a remote management system or operator using internet protocol methods.